

### E. Global Winds/ Planetary Winds

- Air currents are made from rising warm air and sinking cold air around the Earth.
- Global/Planetary winds are created by convection currents and the rotation of the Earth.
- Coriolis Effect the curving path of winds because of the Earth's rotation.

- In the Northern Hemisphere everything is deflected to the right.
- In the Southern Hemisphere everything is deflected to the left.

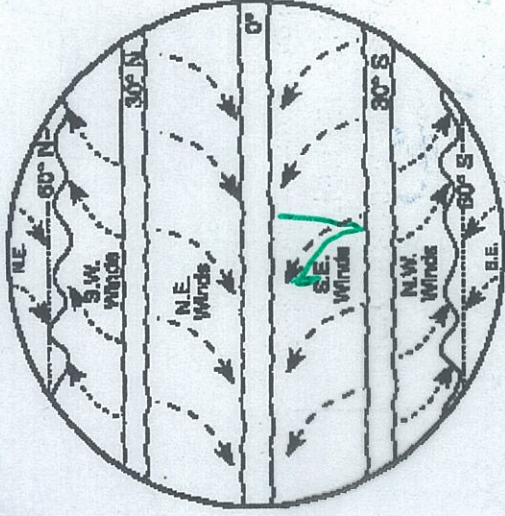
What is the general pattern of air movement on March 21 at Earth's Equator (0°)?

- (1) upward, due to low temperature and high pressure
- (2) upward, due to high temperature and low pressure
- (3) downward, due to low temperature and high pressure
- (4) downward, due to high temperature and low pressure

According to the Earth Science Reference Tables, the prevailing winds at 45° S latitude are from the

- (1) southwest
- (2) northwest
- (3) southeast
- (4) northeast

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The curved paths of the planetary winds are a result of

- (1) changes in humidity
- (2) changes in temperature
- (3) Earth's rotation on its axis
- (4) Earth's gravitational force

### F. Cloud and Precipitation Formation.

- How does clouds form?  
Temperature cools below dew point, air can't hold water vapor.
- Condensation (gas → liquid) tiny drops  
Condensation nuclei
  - dust
  - smoke
  - ash
  - dirt
- Sublimation is the change of phase from a gas directly to a solid.
- Fog is a cloud whose base is at ground level. It forms when moist air at the ground level is cooled below its dew point.  
What good things does precipitation do for us?
  - brings water to Earth
  - cleaned air

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